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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/049,732	06/18/2002	Otfried Schwarzkopf	825-162	4745

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EXAMINER

LOPEZ, FRANK D

ART UNIT	PAPER NUMBER
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3745

DATE MAILED: 11/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/049,732

Applicant(s)

SCHWARZKOPF, OTFRIED

Examiner

F. Daniel Lopez

Art Unit

3745

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 7.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### ***Specification***

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a **single paragraph** on a separate sheet within the range of 50 to 150 words. It is important that the abstract **not exceed 150 words** in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

A substitute specification in proper idiomatic English and in compliance with 37 CFR 1.52(a) and (b) is required. The substitute specification filed must be accompanied by a statement that it contains no new matter.

The substitute specification should indicate that a bearing (30) has a through hole for mounting the bearing on a bearing shaft (14); that the bearing shaft is fixed to a drive shaft, such that the axis of the bearing shaft is at a first tilt angle (22) relative to a longitudinal axis (20) of the drive shaft; that a swash plate (16) is fixed to the bearing, such that an axis of the through hole of the bearing is at a second tilt angle (28) relative to an axis (26) perpendicular to a surface of the swash plate; that the bearing is rotatable on the bearing shaft, from a first position where the first and second tilt axes are added and the swash plate is at a maximum tilt angle, to a second position where the first and second tilt axes are subtracted from each other and the swash plate is at a minimum tilt angle; that the swash plate interacts with pistons in a cylinder; that a portion of the bearing interacts with a threaded portion (58) of the bearing shaft, such that as the bearing is rotated on the bearing shaft, from the maximum tilt angle to the

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minimum tilt angle, a central point of the swash plate is moved axially toward the cylinder; wherein the central point of the swash plate can be defined in a number of ways, including a point of intersection between the axis of the through hole and a plane containing the surface of the swash plate.

### ***Claim Rejections - 35 USC § 112***

The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors. See the discussion of what should be in the substitute specification above.

Claims 1-11 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: a connection between the first tilt angle, the second tilt angle, and/or the range of angles of the swash plate.

Although claim 1 is indefinite, due to the literal translation, the examiner has assumed that applicant meant for the following limitations to be in claim 1:

Claim 1 An axial piston drive with a continuously adjustable piston stroke comprising at least one piston movably disposed in a cylinder and connected to the swash plate;

a bearing shaft fixed to a drive shaft, such that an axis of the bearing shaft is at a first tilt angle relative to a longitudinal axis of the drive shaft;

a swash plate connected to a through hole, wherein the through hole has an axis at a second tilt angle relative to an axis perpendicular to a surface of the swash plate;

wherein the bearing shaft rotatably supports the swash plate, via the through hole;

wherein a controller rotates the swash plate relative to the bearing shaft, from a first position where the swash plate is at a maximum tilt angle, to a second position where the swash plate is at a minimum tilt angle; and

wherein as the swash plate is rotated on the bearing shaft, from the maximum tilt angle to the minimum tilt angle, a central point of the swash plate also moves axially toward the cylinder.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 5 and 7 are rejected under 35 U.S.C. § 102(b) as being clearly anticipated by German 3,420,529. The through hole is in the axially movable sleeve (55).

Claims 1, 7 and 8 are rejected under 35 U.S.C. § 102(b) as being clearly anticipated by Leduc et al. The through hole is supported by a pin (10), mounted on or is a bearing shaft.

Claim 1 is rejected under 35 U.S.C. § 102(b) as being clearly anticipated by Kayakawa et al. The through hole is supported by a pin (15), mounted on a bearing shaft (11)

### ***Conclusion***

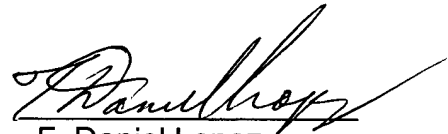
Claims 2-4, 6 and 9-11 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. § 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

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The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Roberts refers to a variable displacement swash plate machine. Ota et al refers to a compressor with an oil separator.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dan Lopez whose telephone number is (703) 308-0008. The examiner can normally be reached on Monday-Thursday from 6:30 AM -4:00 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ed Look, can be reached on (703) 308-1044. The fax number for this group is (703) 872-9306. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0861.



F. Daniel Lopez  
Primary Examiner  
Art Unit 3745  
November 5, 2003